

CLAIMS

1. A rotating fluid machine provided with a rotor chamber formed in a casing, a rotor accommodated rotatably in the rotor chamber, a plurality of vanes slidably supported by a plurality of vane grooves radially formed in a rotor, and a U-shaped vane seal fitted into a seal holding groove formed in the end face of each of the vanes to be in sliding contact with the inner circumferential face of the rotor chamber,

the rotating fluid machine converting the pressure energy of a gaseous phase working medium fed to a vane chamber partitioned by the rotor, the casing and the vanes, into the rotational energy of the rotor and vice versa,

wherein a pair of engaging holes communicating with opposite ends of the seal holding grooves are formed in the end faces of the vanes,

wherein slits opening outward in the radial direction of the rotor and closing inward in the radial direction are formed in a pair of seal ancillary members fitted into the engaging holes, and

wherein the opposite ends of the vane seal are fitted into the slits.

2. The rotating fluid machine according to claim 1, wherein the opposite ends of the vane seal are tightly stuck into the slits in the seal ancillary members by pressing the seal ancillary members with springy members accommodated in the bottom parts of the engaging holes in the vanes.